

ADDITIONAL NOTES ON THE GENUS AEGIPHILA -- III

Harold N. Moldenke

The following notes constitute a continuation of those published in *Phytologia* 1: 182--208 and 222--240 (1937).

85. AEGIPHILA MONTANA Moldenke.

Additional citations: COLOMBIA: Huila: Rusby & Pennell 701 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photos of type & of isotype, P--photo of type, S--photo of type, W--photo of type, Z--photos of type & of isotype).

32a. AEGIPHILA MONTICOLA Moldenke in Fedde, *Repert.* 37: 210--211. 1934.

Tree; branchlets and twigs slender, obtusely tetragonal, furfuraceous; principal internodes 1--2.5 cm. long; leaf-scars borne on short appressed sterigmata 2--3 mm. long; leaves decussate-opposite; petioles slender, 12--15 mm. long, furfuraceous; blades elliptic or elliptic-obovate, 8--12 cm. long, 3--6.1 cm. wide, acute at apex, entire, acute at base, densely punctate above, more or less furfuraceous (especially on the venation) beneath; midrib stoutish, very prominent beneath, slightly so above; secondaries slender, about 8 on each side, arcuate-ascending, prominent beneath and arcuate-joined near the margins; vein and veinlet reticulation rather sparse; inflorescence axillary; cymes solitary, opposite, to 4 cm. long and 3.5 cm. wide, bifurcate and brachiate, laxly many-flowered; peduncles slender, 1--2 cm. long, furfuraceous; pedicels slender, 1--3 mm. long, furfuraceous; bractlets and prophylla linear, 1--4 mm. long, furfuraceous; calyx obconic, about 5.7 mm. long and 4.1 mm. wide at apex, coriaceous, densely pulverulent, sometimes slightly verruculose, its margin 4-lobed, its lobes truncate, their margins distinctly scarious; corolla infundibular, white, its tube broadly cylindrical, about 9.6 mm. long, glabrous, its lobes 4, ovate-lingulate, about 4.5 mm. long and 3.3 mm. wide, acute; stamens 4, inserted about 1.5 mm. below the mouth of the corolla-tube, included; filaments filiform, about 1.3 mm. long; anthers oblong, about 3.6 mm. long and 1.3 mm. wide; pistil included; style about 3.9 mm. long, glabrous; stigma bifid, its branches about 2.6 mm. long and slightly divaricate; ovary tetragonal, about 1 mm. long and wide, glabrous, 4-lobed, 4-celled.

The type of this interesting species was collected by Dr. August Rimbach (No. 118) near Riobamba, "on the outer slope

of the Western Cordillera", Chimborazo, Ecuador, at an altitude of 2500 m., in November, 1932, and is deposited in the herbarium of the Field Museum of Natural History at Chicago. The collector notes that it is a middle-sized tree of forests, with white corollas, 4 broad corolla-segments, and 4 stamens inserted in and included by the corolla-tube. He also states that the flowers are faintly scented and that the wood is not used by the natives of the region. In its general habit this species reminds one greatly of some members of the section Amerina, especially A. grandis. The Schimpff 252 cited below seems to bear strong resemblances to A. bogotensis, and, indeed, one flower was found in its inflorescence with 5 corolla-segments. It would appear that these three species need further study.

ECUADOR: Pichincha: Schimpff 252 (E, N--fragment); Chimborazo: Rimbach 118 [Mus. Yale School of Forestry 22,820] (A--isotype, B--photo of type, F--type, K--photo of type, N--isotype, N--photos of type & of isotype, S--photo of type, Y--isotype, Z--photos of type & of isotype).

7a. AEGIPHILA MORTONI Moldenke, sp. nov.

Frutex; ramulis dense breviterque pubescentibus; foliis chartaceis oblongis vel ellipticis acutis integris, ad basin obtusis vel acutis, supra breviter pubescentibus, subtus densissime tomentosis barbellatisque non glanduliferis; inflorescentiis axillaribus cymosis capitatis dense multifloris dense albo-tomentosis perspicue bracteolatis.

Shrub to 7 m. tall; branchlets medium-slender, gray-brown in color, obtusely tetragonal, densely short-pubescent throughout, slightly flattened at the nodes; nodes not annulate; principal internodes 3--5.5 cm. long; leaves decussate-opposite; petioles slender or medium-stoutish, 1.5--1.8 cm. long, densely tomentose with whitish hairs, flattened (but not margined) above, convex beneath; blades chartaceous, very dark green above (brunnescent in drying), much lighter beneath, oblong or elliptic, 9.5--13 cm. long, 3.3--4.4 cm. wide, acute at apex, entire, obtuse or acute at base, not at all prolonged into the petiole, short-pubescent above (much more densely so or tomentellous along the midrib), very densely tomentose-pubescent beneath and densely barbellate along the midrib and secondaries, not glanduliferous; midrib slender and densely tomentellous-pubescent above with whitish hairs, rounded-prominent beneath; secondaries slender, 8--12 per side, ascending, only very slightly arcuate, flattened above, prominent beneath, rather obscurely arcuate-joined at the margins beneath; vein and veinlet reticulation indiscernible above, hidden in the tomentum or somewhat conspicuous beneath and flat or subprominent; inflorescence axillary, cymose; cymes solitary, opposite, capitate, 1--2

cm. long and wide, densely white-tomentose throughout, densely many-flowered, shorter than the subtending petioles, conspicuously bracteolate; bractlets and prophylla linear, elongate, 8--10 mm. long, very densely short-pubescent with fulvous hairs, usually 3 clustered at the very base of the calyx; calyx obconic, 6--7 mm. long, 3.5--5 mm. wide, very densely short-pubescent with fulvous hairs, 5-ribbed, its rim 5-toothed, the teeth broadly triangular, about 1 mm. long and 2 mm. wide at base, acute; corolla-tube (in bud) broadly cylindric, about 4 mm. long, glabrous; corolla-limb 5-parted, its lobes (in bud) regular, obovate, 2--3 mm. long, about 2 mm. wide, rounded or subcucullate at apex, glabrous; stamens (in bud) 5, inserted about half way up the corolla-tube, included; filaments flattened, about 1.5 mm. long, glabrous; anthers oblong, elongate, about 2.5 mm. long, 1 mm. wide, dorsifixed near the base; pistil (in bud) included; style capillary, 2--3 mm. long, glabrous; stigma bifid, its branches erect, about 2 mm. long; ovary subglobose, about 1.5 mm. long and 1 mm. wide, umbilicate at apex, glabrous; fruit in large clusters, green (according to Cook & Gilbert).

The type of this most distinct species was collected by Orator Fuller Cook and Grover Bruce Gilbert (No. 1234) at Píñasniocj, Panticalla Pass, altitude 3600 m., Cuzco, Peru, June 18, 1915, and is deposited in the United States National Herbarium. The collectors describe the species as a "shrub 15--20 ft. high, with large clusters of green berries". It is named in honor of my esteemed friend and colleague, Dr. Conrad Vernon Morton, assistant at the United States National Herbarium and a recognized authority on the Solanaceae and Acanthaceae.

PERU: Cuzco: Cook & Gilbert 1234 (N--fragment of type, W--type).

11. AEGIPHILA MULTIFLORA Ruíz & Pav.

An additional synonym is Clerodendron bolivianum Britton ex Rusby, Bull. Torrey Club 27: 82 (1900). This binomial is often inaccurately accredited to Rusby. The type of Clerodendron bolivianum was collected by Henry Hurd Rusby (No. 2619) at Unduavi, El Beni, Bolivia, and is deposited in the herbarium of Columbia University. It is identical with the type collection of the Ruíz & Pavon species. Although this species superficially greatly resembles a Clerodendrum, its floral characters show that it actually is an Aegiphila. Steinbach reports that the flowers are red or rose in color, that it is a bush 2--3 m. tall, and that it ascends to an altitude of 3300 m. The second type locality name is spelled "Pillão" on the type sheet in the British Museum. It was misspelled "Pellao" by me on page 475 of my original

monograph.

Additional citations: PERU: Huanuco?: Ruiz & Pavon s.n. [Huassachuass & Pallao] (A--photo of isotype, B--photo of isotype, Bm--type & 2 isotypes, Cb--isotype, D--photo of isotype, F--photo of isotype, G--photo of isotype, K--photo of isotype, N--fragment of isotype, N--2 photos of isotypes, P--isotype, S--photo of isotype, W--photo of isotype, X--photo of isotype, Z--3 photos of isotypes), s.n. (Bm); Puffo: Weddell 4626 (N--photo, Z--photo); Department undetermined: Dombey 251 (Le), s.n. [Páson Huara-huari] (P); Ruiz 187 (B). BOLIVIA: El Beni: Buchtien 2992 (G, Le, N, W--2), s.n. [XI. 1910] (B); Julio 454 (W); H. H. Rusby 2619 (C, D, G, W); Cochabamba: Steinbach 5809 (B, N--photo, Z--photo).

125. AEGIPHILA NERVOSA Urb.

An additional synonym is Aegiphila reticulata L. C. Rich., in herb. [not A. reticulata Moldenke, 1933]. The following notes made by Dr. A. C. Smith concerning the specimens of this species in Urban's herbarium in February, 1932, are of interest: "The Haïti specimens are certainly conspecific. Concerning their identity with the fragment from Jamaica I am less certain. The young leaf of the fragment is similar to those of the Haïti specimens. The remaining calyx of the fragment is a trifle less pilose than that of the others; however, I conclude that all the above specimens are one species."

Additional citations: JAMAICA: Collector undesignated s.n. ["Bois de Calme"] (Cb); Swartz s.n. (A--photo of type, B--fragment of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photos of type & of fragment of type). HISPANIOLA: Haïti: W. Buch 1239 (B), 1949 (B, N--photo, Z--photo); Christ 1946 (B), 1992 (B), 2229 (B); Ekman H.472 (A--photo, B, B--photo, D--photo, F--photo, G--photo, K--photo, N--photo, P--photo, W--photo, Z--photo), H.1518 (B, N--photo, Z--2 photos), H.8971 (B, N--photo, Z--photo); Herb. Lamarck 261 (P); Picarda 171 (B), 1418 (B--2); L. C. Richard s.n. [S.-D.] (P).

51. AEGIPHILA NOVOPRIBURGENSIS Moldenke.

Additional citations: BRAZIL: Rio de Janeiro: Clausen 134 (Cb--isotype, N--fragment of isotype).

49. AEGIPHILA NOVOGRANATENSIS Moldenke.

This species has occasionally been confused with Cordia sp. and herbarium specimens have been distributed under that name. The Lehmann 8524 cited by me on page 349 of my monograph is actually the type collection of A. aculeifera

and should therefore be deleted.

Additional citations: COLOMBIA: Antioquia: Lehmann 4066 (A--photo of type, B--2 isotypes, B--photo of type, Bm--isotype, D--photo of type, F--isotype, F--photo of type, G--photo of type, K--isotype, N--photos of type & of isotype, P--photo of type, S--photo of type, W--photo of type, X--isotype, Z--photos of type & of isotype).

119. AEGIPHILA OBDUCTA Vell.

This is said to be a rather large tree at times, with creamy-white and very fragrant flowers. The very young leaves are often very densely villose-lanuginous above as well as beneath, this villosity gradually wearing off as the leaves mature.

Additional citations: BRAZIL: Amazonas: Ule s.n. (B); Minas Geraes: Bunbury 297 (K); Clausen 8 (Cb, P), 652 (Us), s.n. [Aug.--April, 1840] (Bm, K); Damazio 1786 (X--2); Riedel 452 (L--3); Saint-Hilaire C³.1774 (P--3); Schwacke 9556 (Cb--3); Sellow 1256 (N--photo, Z--photo), 5930 (B--7, Z--2 photos), s.n. (B, Z--photo); Rio de Janeiro: Bowie & Cunningham s.n. (Bm, N--photo, Z--photo); Brade 10,542 [Herb. Rio de Janeiro 22,947] (B); Burchell 2018 (G, K); Casaretto 926 (Cb); G. Gardner 5125 (A--photo, B--photo, Bm, D--photo, F--photo, G--photo, K, N--photo, W--photo, Z--photo), 5830 (Bm, K, N--photo, Z--photo); Glaziou 1498 (Br--3, Cp, K, P), 3068 (Br--2, Cp, P), 4160 (Cp--2, P, Z--2 photos), 4161 (Cp, P), 6652 (Cp, K, N--photo, P, Z--2 photos), 11,338 (Cp, K, P, Z--photo), 11,339 (Cb, Cp, K, P, Z--photo), 18,394 (B, Bm, Cp, K, P, Z--photo), 19,722 (Cp, K, P, Z--photo); Guillemin 975 (Cb, Dc, P--2); Houllet s.n. (Br); Miers s.n. [Organ Mount.] (Bm); Riedel O,33 (L--2); Schott 4950 (V--2, Z--photo); Wawra 342 (V); São Paulo: Bowie & Cunningham s.n. [Road to Sta. Amaro, near Sta. Paulo] (Bm); Burchell 4015 (K); Gaudichaud 265 (P); Puiggari 3200 (P), 3225 (P); Schwacke 1939 (Cb); Paraná: Dusen 379a (E--2, Z--photo), 8143 (A--photo, B, B--photo, Cb, D--photo, E, F--photo, G, G--photo, K, N--photo, S, W, W--photo, Z--photo); Jönason 379a (B, Ca, Cb, D, N--photo, S, W, Z--photo); Santa Catharina: Bunbury 463 (K); Fox 463 (Bm); Schwacke 13,098 (Cb); Ule 785 (Z--photo); State undetermined: Collector undesignated 23 (Z--photo); Sellow s.n. (B). CULTIVATED: Brazil: São Paulo: Handro s.n. [Herb. Inst. Biol. S. Paulo 33,523] (N); F. C. Hoehne s.n. [Herb. Inst. Biol. S. Paulo 33,523] (K), pl. viv. 442 [Herb. Inst. Biol. S. Paulo 33,523] (K, N, Sp). ILLUSTRATION: Line-drawing (N).

77. AEGIPHILA OBOVATA Andr.

Synonyms are Aegiphila dubia Moldenke in Fedde, Repert. 33: 120 (1933) and Aegiphila sylvatica Greg, in herb. [not

A. sylvatica Moldenke, 1935]. At the time when my monograph was sent to the printer, I had not yet been able to secure the loan of the type collection of Andrews' A. obovata, and so, on page 391 of my monograph, I placed Andrews' name in synonymy under A. dubia with a question. From Andrews' illustration and description I had surmised that his species and mine were the same, but hesitated to resurrect his name without having seen the actual type specimen. Since this time Andrews' type has been examined by myself and found to be definitely conspecific with the A. dubia of pages 391--394 of my monograph. Andrews' name, being by far the older, must therefore be used for this species. The name A. sylvatica Greg is supposed to have been published in Sloane's Hist. Jamaica, but as yet I have not succeeded in locating the reference. The species is said to inhabit rocky vales and roadsides. It is described as a shrub or small tree, with greenish-white or -yellow corollas. The common name of "timber fiddlewood" has been recorded.

Additional citations: TOBAGO: W. E. Broadway 2973 [Herb. Monac. 4305] (B, E, Le, Mu), 9064 (E, K--2); Greg s.n. (Bm); Seitz 61 (B), 92 (B); R. O. Williams s.n. [Trin. Bot. Gard. Herb. 11,115] (N--photo, Z--photo). TRINIDAD: W. E. Broadway 2584 (B), 3157 (B, Le), 6349 (Bm, E, K), 6396 (Bm, E), 6406 (Bm, E, K, N--photo, Z--photo), 9128 (Bm); Finlay s.n. [Trin. Bot. Gard. Herb. 2386] (Z--2 photos), s.n. [Trin. Bot. Gard. Herb. 2389] (A--photo, B--photo, D--photo, F--photo, G--photo, N--3 photos, P--photo, S--photo, W--photo, Z--2 photos); Trin. Bot. Gard. Herb. 2388 (Z--photo), 5668 (N--photo, Z--photo); R. O. Williams s.n. [Trin. Bot. Gard. Herb. 12,026] (A--photo, B--photo, D--photo, F--photo, G--photo, K, N--photo, P--photo, S--photo, W--photo, Z--2 photos), s.n. [Trin. Bot. Gard. Herb. 12,163] (K, Z--photo), s.n. [Trin. Bot. Gard. Herb. 12,180] (K, N--photo, Z--photo). CULTIVATED: British Guiana: British Guiana Bot. Gard. s.n. [May, 1905] (K, U); England: Hort. Boyton s.n. [A. B. Lambert, 1807; Lord Seaforth, West Indies] (B--photo of isotype, Cb--3 isotypes, K--photo of isotype, N--fragment of isotype, N--photo of isotype, S--photo of isotype, Z--photo of isotype). ILLUSTRATION: Copy of Andr. Bot. Rep. 9: pl. 578. 1809 (Ba).

58. AEGIPHILA OBTUSA Urb.

Additional citations: JAMAICA: N. L. Britton 3224 (B, N--photo, Z--photo); W. Harris 8996 (A--isotype, A--photo of isotype, B--type, B--photo of isotype, Bm--isotype, D--photo of isotype, G--photo of isotype, K--isotype, N--2 photos of isotypes, P--photo of isotype, S--photo of isotype, W--photo of isotype, Z--2 photos of isotypes).

52. AEGIPHILA ODONTOPHYLLA Donn. Sm.

Additional synonyms are Aegiphila furia Ørst., in herb., and Aegiphila fusca Ørst., in herb. The Stork 2230 cited by me on pages 352 and 476 of my monograph is actually A. aculeifera. The character of the teeth on the margins of the leaf-blades serves to distinguish the two species at once.

Additional citations: COSTA RICA: Guanacaste: Ørsted 11,174 [Macbride photos 22,775] (Cp, F--photo, N--photo, Z--photo); Heredia: H. Pittier 288 (A--photo of type, B--photo of type, Br, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

110. AEGIPHILA OVA'IA Moldenke.

Additional citations: PERU: Junín: Killip & Smith 26,520 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type). BOLIVIA: La Paz: Ule 9718, in part (B).

69. AEGIPHILA PANAMENSIS Moldenke.

An additional synonym is Aegiphila nigrescens Ørst., in herb. Paul records the vernacular name "hombre grande" from Panama, and describes the plant as a shrub 2--3 m. tall, blooming in November and December at an altitude of 1050--1075 m. Skutch collected it in a forest at an altitude of 850 m., blooming in July, and describes it as arborescent, to 6 m. tall, with yellowish flowers. It has been thought by some herbarium workers to belong in the Rubiaceae, and herbarium specimens have been thus distributed!

Additional citations: COSTA RICA: Alajuela: Brenes 3574 [110] (F), 4320 [105] (F), 4345b [105a] (F), 4395 [180] (F), 14,313 (F); San José: Skutch 2680 (N); Cartago: Ørsted 11,175 (Cp), 11,178 (Cp). PANAMA: Bocas del Toro: Cooper & Slater 117 (N--photo, Z--2 photos); Dunlap 407 (Z--photo), 438 (Z--photo); Stork 20 (M1); Canal Zone: Killip 12,171 (N--photo, Z--photo); Piper 5616 (N--photo, Z--photo); Colon: H. Pittier 4149 (G, Z--photo); Panamá: Heriberto 163 (Z--photo); Faul 153 (W); H. Pittier 6815 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type, P--photo of type, W--photo of type, Z--photo of type); P. C. Standley 28,155 (Z--photo); Province undetermined: Duchassaing s.n. [Panama] (P--5).

74. AEGIPHILA PANICULATA Moldenke.

Additional citations: NICARAGUA: Segovia?: Englesing 100 (N--photo, W, Z--photo). PANAMA: Canal Zone: P. C. Standley 29,232 (Z--photo), 30,246 (N--photo, Z--photo); Panamá: P.

C. Standley 28,871 (N--photo, Z--photo). COLOMBIA: Santander Sur: Killip & Smith 14,729 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photos of type & of isotype, P--photo of type, S--photo of type, W--photo of type, Z--photos of type & of isotype).

34. AEGIPHILA PARAGUARIENSIS Briq.

The Burchell 8345 cited by me on pages 339 and 472 of my monograph as A. integrifolia has proved on further study to be A. paraguariensis.

Additional citations: BRAZIL: Minas Geraes: Lindley 222/222b (Br); Martius s.n. [Herb. Monac. 1031] (Mu); Stephan s.n. [1843] (Br); Warming s.n. [Lagoa Santa] (Bm, Cp--2, Z--photo); Goyaz: Burchell 8345 (G, K); G. Gardner 3401 (Br, K); Matto Grosso: Malme 2473a (B, Cb, G, Us); Rio de Janeiro: Glaziou 11,334 (Cp, K, P, Z--photo); São Paulo: Löfgren 245 (B); Mendonça 727 (B); Paraná: Dusén 10,472 (B, Ca, E, G, N--photo, W, Z--photo), 15,963 (B, Cb, D, E, K, N--photo, W, Z--2 photos); Löfgren 95 (Z--photo), 99 (Z--photo); State undetermined: Collector undesignated 404 (B); Herb. Martius 379 (Br); Sellow s.n. (B). PARAGUAY: Fiebrig 5631 (B); Hassler 1921 (Z--photo of cotype), 4498 (B--photo of cotype, Bm--cotype, Cb--cotype, D--photo of cotype, F--cotype, F--photo of cotype, G--photo of cotype, K--photo of cotype, N--fragment of cotype, N--3 photos of cotypes, P--cotype, V--photo of cotype, W--photo of cotype, X--cotype, Z--4 photos of cotypes), 5056 (Bm--cotype, Cb--2 cotypes, F--fragment of cotype, N--3 photos of cotypes, P--cotype, X--cotype, Z--3 photos of cotypes), 6766 (Bm--cotype), 6931 (Bm--cotype, Cb--cotype, K--cotype, N--fragment of cotype, N--photo of cotype, P--cotype, X--cotype, Z--2 photos of cotypes), 10,852 (B).

36. AEGIPHILA PARVIFLORA Moldenke.

Additional citations: VENEZUELA: Bolívar: Grosourdy Cat. 13 s.n. (Z--photo). BRAZIL: Pará: Spruce 342 [Herb. Monac. 1033] (Mu), 589 (A--photos of type & of isotype, B--photos of type & of isotype, Bm--isotype, Cb--isotype, D--photos of type & of isotype, F--photos of type & of isotype, G--photos of type & of isotype, N--photos of type & of 3 isotypes, W--photos of type & of isotype, Z--photos of type & of 3 isotypes).

25. AEGIPHILA PAUCIFLORA Standl.

Dr. J. S. Karling of Columbia University states that the word "guamil" which occurs on page 314 of my monograph is a misspelling of "huamil".

Additional citations: BRITISH HONDURAS: D. Stevenson 5

(A--photo of type, B--photo of type, D--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

122. AEGIPHILA PAVONIANA Moldenke.

The Conserv. Bot. Geneva specimen cited below is labelled "Mexique -- Pavon", but Urban claims that specimens thus labelled were probably collected by Sessé and Mocifio in Mexico and sent to Pavon by them. The species was described by myself from a specimen labelled "Peruvia -- Herb. Pavon" and was said by me to have been collected somewhere in Peru by Ruiz and Pavon (vid., Brittonia 1: 190, 460, and 461). This assertion was made on the basis of the specimen in the Herbarier Boissier, which was the only known specimen at the time of that writing and which is the type specimen of the species. The label on the Conservatoire Botanique specimen is obviously older and contains longhand inscriptions. It would seem, therefore, to be the more authentic. The label of the Herbarier Boissier specimen seems to be one of a uniform form label printed in Geneva for Pavon's herbarium when this was received, on the assumption (apparently erroneous) that all the specimens in this herbarium came from Peru. The specimen in the herbarium of the British Museum (which also claims to possess Pavon's original herbarium!) has a label which bears the inscription, apparently in Pavon's own handwriting, "Huayaquil". It would seem to me that this last-mentioned specimen is probably the most authentic of all and that the species is actually a native of Ecuador, the type having been collected at Guayaquil.

Additional citations: ECUADOR: Guayas: Herb. Pavon s.n. [Huayaquil] (Em), s.n. ["Peruvia"] (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type); Pavon s.n. ["Mexique"] (Cb, N--fragment, N--photo).

72. AEGIPHILA PENDULA Moldenke.

The Heinrichs specimens cited below were collected in fruit in July, the leaf-blades are densely puberulent with erect hairs on both surfaces, the fruit is described as yellow, and the collector describes the plant as a rare shrub about 2 m. tall.

Additional citations: PANAMA: Canal Zone: P. C. Standley 25,719 (Z--photo). VENEZUELA: Zulia: H. Pittier 10,645 (A--photo of type, B--photo of type, Cb--2 isotypes, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photos of type & of isotype, P--photo of type, S--photo of type, W--photos of type & of isotype, Z--photos of type &

of isotype); Tejera 157 (N--photo, Z--photo), 168 (Z--photo) ECUADOR: Oriente: Heinrichs 499 (Cb--2, N, N--fragment, N--photo, Z--photo).

48. AEGIPHILA PENNELLII Moldenke.

Additional citations: COLOMBIA: Tolima: Pennell 3185 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

35a. AEGIPHILA PERNAMBUCENSIS Moldenke, sp. nov.

Frutex vel arbuscula; ramulis plusminus puberulis; samentis dense breviterque pubescentibus; petiolis brevibus densissima breviterque pubescentibus; laminis chartaceis oblongo-ellipticis vel obovatis abrupte acutis vel subacuminatis integris, ad basin subcuneatis vel acuminatis, supra minute puberulis vel glabris et nitidis, subtus dense furfuraceo-tomentosis; inflorescentiis axillaribus; cymis dense multifloris obscure brachiatis; calyce campanulato dense tomentello, margine 4-apiculato.

Shrub or small tree; branchlets tetragonal, gray, medullose, lightly or densely puberulent, marked with large and prominent corky leaf-scars; twigs slender, tetragonal, often decussately flattened and ampliate at the nodes, very densely short-pubescent with dark brown hairs; principal internodes 1.4--5 cm. long; leaves decussate-opposite; petioles rather slender, 2--12 mm. long, very densely short-pubescent like the twigs, flattened above; blades chartaceous, oblong-elliptic or obovate, dark green above (brunnescent in drying), much lighter beneath, 5--16 cm. long, 2.5--5 cm. wide, abruptly acute or subacuminate at apex, entire (or on watersprouts and young shoots often coarsely and irregularly crenate-dentate with sharp teeth), subcuneate or acuminate at base, minutely puberulent above, becoming glabrate and nitid, densely furfuraceous-tomentose with rather short cinereous hairs beneath; midrib comparatively slender, flattened and usually puberulent above, very prominent beneath; secondaries slender, 6--9 per side, arcuate-ascending, flat or very slightly impressed above, prominent beneath, the terminations mostly hidden in the tomentum beneath; inflorescence axillary; cymes solitary, opposite, 2--2.5 cm. long, 1.2--2.2 cm. wide, densely many-flowered, rather obscurely brachiate; peduncles slender, 6--10 mm. long, densely short-pubescent with brown or cinereous hairs; pedicels slender, 0.5--2 mm. long, pubescent with cinereous hairs; bractlets and prophylla linear, 2--3 mm. long, cinereous-short-pubescent; calyx campanulate, about 3.8 mm. long and 3.1 mm. wide at apex, densely tomentellous with hairs about 0.2 mm. long,

obscurely 4-ribbed at apex, its rim 4-apiculate, the apiculations about 0.2 mm. long; corolla hypocrateriform, actinomorphic, glabrous, its tube narrow-cylindric, about 3.1 mm. long and 0.7 mm. wide, straight, its limb 4-parted, its lobes oblong-lingulate, about 4.2 mm. long and 2.1 mm. wide, acute or blunt at apex; stamens 4, greatly exerted, inserted about 0.2 mm. below the mouth of the corolla-tube; filaments filiform, about 5.2 mm. long, glabrous; anthers oblong, about 1 mm. long and 0.5 mm. wide, 2-celled, dorsifixed just above the base; pistil included; style capillary, about 3.6 mm. long, glabrous; stigma bifid, its branches about 1.5 mm. long, slightly divergent; ovary subglobose, about 0.7 mm. long and 0.6 mm. wide, glabrous, 4-lobed, 4-celled, terminated by a flattened glandular 4-lobed disk; fruiting-calyx and fruit not seen.

The type of this species was collected by Don Bento Pickel (No. 3042) in a thicket at Tapera, Pernambuco, Brazil, July 14, 1932, and is deposited in the Britton Herbarium at the New York Botanical Garden. The species was included with A. crenata by myself in my monograph and in the first installment of these supplementary notes (Brittonia 1: 327. 1934; Phytologia 1: 196. 1937) and the Pickel collections from Pernambuco were all erroneously cited as A. crenata. A. crenata is a more southern species, confined to Minas Geraes, São Paulo, and Paraná. One sheet of the type collection in the Britton Herbarium is composed of the tips of water-sprouts with conspicuously obovate leaf-blades, which are cuneate at the base and with their margins coarsely and very irregularly crenate-dentate. The collector states that these twigs were taken from an offshoot of a young plant.

BRAZIL: Pernambuco: Pickel 526 [Herb. Inst. Biol. S. Paulo 20,089] (B, N), 3030 (N), 3042 (Ba--isotype, I--isotype, N--type, N--4 isotypes, W--isotype); Ramage s.n. [21 Jan. 1888] (Bm); Rio de Janeiro: Burchell 9 (K); Swainson s.n. (G, K).

75. AEGIPHILA PERPLEXA Moldenke.

Additional citations: TOBAGO: W. E. Broadway 4243 (B, Cp); Eggers 5540 (B, Le, N--photo, P, Vu, Z--2 photos). TRINIDAD: D. W. Alexander s.n. [Trin. Bot. Gard. Herb. 5022] (B); Fendler 571 (Z--photo), 592 (Bm, Ed--2, N--photo, Z--photo). VENEZUELA: Delta Amacuro: Rusby & Squires 316 [Herb. Monac. 1843] (B--photo of type, Bm--isotype, Cb--isotype, D--photo of type, E--isotype, Ed--isotype, G--photo of type, K--isotype, Mi--isotype, Mu--isotype, N--photos of type & of 2 isotypes, P--photo of type, S--isotype, S--photo of type, Vu--isotype, W--photo of type, X--isotype, Z--photos of type & of 2 isotypes).

64. AEGIPHILA PERUVIANA Turcz.

Klug describes the species as a shrub about 1 m. tall, growing in forests, with cream-colored corollas, blooming in January. It seems very probable that further study will bring to light a sufficient number of differences between the Peruvian and Bolivian specimens cited for this species, to justify their separation (as Dr. Rusby maintains) and to warrant the application of a new name to the Bolivian form, even if only of varietal rank.

Additional citations: PERU: San Martín: Klug 3511 (Cb, E, I, N); A. Mathews 1617 (N--photo, Z--photo), s.n. [Moyobamba] (Z--photo); Spruce 4275 [Macbride photos 24,619] (A--photo of isotype, B--photo of isotype, Bm--isotype, Br--isotype, Cb--2 isotypes, Cp--isotype, D--photo of isotype, Ed--isotype, F--fragment & photo of isotype, F--photo of isotype, G--photo of isotype, K--isotype, N--3 photos of isotypes, P--isotype, P--photo of isotype, S--photo of isotype, W--photo of isotype, Z--3 photos of isotypes); L. Williams 5383 (N--photo, Z--photo), 5479 (Z--photo), 5480 (Z--photo), 5588 (Z--photo), 5697 (Z--photo), 6152 (Z--photo), 6291 (Z--photo), 6304 (Z--photo), 6836 (A--photo, B--photo, D--photo, N--2 photos, P--photo, S--photo, W--photo, Z--photo), 6860a (Z--photo), 7334 (Z--photo); Loreto: Ule 6476 (K). BOLIVIA: El Beni: H. H. Rusby 2473 (Bm, E, Ed, K, Pr, W, Z--4 photos).

100. AEGIPHILA PLATYPHYLLA Briq.

Additional citations: PARAGUAY: Hassler 8056 (B--photo of isotype, Bm--isotype, Cb--isotype, D--photo of isotype, F--isotype, F--photo of isotype, G--photo of isotype, K--isotype, N--fragment of isotype, N--3 photos of isotypes, P--isotype, S--photo of isotype, W--photo of isotype, X--isotype, Z--photos of type & of 3 isotypes).

60. AEGIPHILA FLICATA Urb.

Additional citations: JAMAICA: Bertero 2105 (B--type, Dc--isotype, Z--photos of type & of isotype), s.n. [Majo Jun. 1831] (B).

88. AEGIPHILA PUBERULENTA Moldenke.

Additional citations: COLOMBIA: Bolívar: Elias 617 (A--photo of type, B--photo of type, D--photo of type, G--photo of type, K--photo of type, N--photos of type & of isotype, P--photo of type, S--photo of type, W--photo of type, Z--photos of type & of isotype), 673 (N--photo, Z--photo).

105. AEGIPHILA PULCHERRIMA Moldenke.

Additional citations: PERU: Junín: Schunke 400 (N--photo, Z--photo), 443 (A--photo of type, B--photo of type, D--photo

of type, G--photo of type, K--photo of type, N--photos of type & of isotype, P--photo of type, S--photo of type, W--photo of type, Z--photos of type & of isotype).

91. AEGIPHILA QUINDUENSIS (H.B.K.) Moldenke.

The "Pittier 8806" cited by me on pages 416 and 475 of my monograph should have been cited as "H. Pittier 8806". Some sheets of this collection are A. elata and have been designated as H. Pittier 8806a.

Additional citations: COLOMBIA: Cundinamarca: Mutis 782 (W); Tolima: Bonpland 5864 (P); Goudot s.n. [Quindiu] (N--photo, P, Z--photo); Humboldt & Bonpland s.n. [El Moral, Quindiu] (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type). VENEZUELA: Federal District: H. Pittier 10,404 (Ba, Cb--2, P, Z--photo); Carabobo: Karsten s.n. [Puerto Cabello] (A--photo, B--photo, D--photo, F--photo, G--photo, N--2 photos, P--photo, S--photo, W--photo, Z--2 photos); H. Pittier 8806 (Z--photo).

115. AEGIPHILA RACEMOSA Vell.

The Sagot 473 cited by me on pages 449 and 476 of my monograph should read "in part", since some sheets of this collection seem to be A. glandulifera var. pyramidata. The Aegiphila aequinoctialis Mart. cited on page 421 as a synonym of A. vitelliniflora is actually a synonym of A. racemosa. This has been determined through examination of the type specimen, Martius 2724, in the Munich herbarium. The "Schomburgk 281" cited on page 476 was cited in error and should be deleted. The "Dahlgren & Sella 542" cited on page 473 is a typographic error for Dahlgren & Sella 524. The species has been confused by some herbarium workers with A. foetida Sw., and some herbarium specimens have been distributed under that name! The two Goeldi collections cited below are very anomalous in their thinly membranous leaf-blades, but in all other respects match precisely typical specimens of A. racemosa. They may possibly represent a hybrid with A. vitelliniflora.

Additional citations: VENEZUELA: Zulia: Rutten-Pekelhar- ing 40 (Ut). BRITISH GUIANA: Aitken 1082 (K); Beckett 8447 (K, U); De la Cruz 946 (A--photo, B--photo, D--photo, F--photo, N--photo, W--photo, Z--photo), 3627 (A--photo, B--photo, D--photo, E, G--photo, N--photo, W--photo, Z--2 photos), 4292 (E), 4552 (E); Drake s.n. (N--2 photos, Z--photo); Jenman 1993 (N--photo, U, Z--2 photos), 6715 (K, U); M. R. Schomburgk 123 (Z--photo), 146 (B, Z--photo), 183 (Bm, Cb, K), 615 (Z--photo). SURINAM: Berthoud-Coulon 550 (Bm); Collector indig. Suriname 87 (Ut); Department of Forestry

2850 (Ut); Kappler 1717 (E, P, Ut, V, Z--photo). FRENCH GUIANA: Collector undesigned s.n. (P); Mélinon 174 (Z--photo), 424 (P, Z--photo); Sagot 473, in part (Cb--3, K, P--4, V, Z--2 photos), s.n. [Karovany, 1854--58] (P). BRAZIL: Amazonas: Martius 0,39 [Herb. Monac. 1012] (Mu), s.n. [R. Negro; Herb. Monac. 1011] (Mu); Pará: Burchell 9726 (K, N--photo, Z--photo); Dahlgren & Sella 524 (N--photo, Z--photo); Goeldi 6999 (Cb), 7002 (Cb); Killip & Smith 30,278 (Z--photo); Martius 2724 [Herb. Monac. 1008] (Mu); Snethlage 109 (B, F); Pernambuco: Pickel 3642 (W); Bahia: Martius s.n. [Herb. Monac. 1000 & 1009] (Mu--2); State undetermined: Blanchet s.n. (Bm--2). LOCALITY OF COLLECTION UNDESIGNATED: Herb. A. L. Jussieu 5039 (P). ILLUSTRATION: Line-drawing (N).

89. AEGIPHILA RETICULATA Moldenke.

Additional citations: COLOMBIA: Cundinamarca: Mutis 985 [857] (F--photo of type, G--photo of type, K--photo of type, N--photo of type, S--photo of type, Z--photo of type).

24. AEGIPHILA RIEDELIANA Schau.

Schwacke says that the branches of this species are pendent, the corolla yellow, the fruit green, and that it blooms in November, a vernacular name being "cajuja".

Additional citations: BRAZIL: Bahia: Pohl 4392 (A--photo of cotype, B--photo of cotype, D--photo of cotype, F--photo of cotype, G--photo of cotype, N--photo of cotype, S--photo of cotype, W--photo of cotype, Z--photo of cotype); Minas Geraes: Mosén 2005 (S); Rio de Janeiro: Burchell 1985 (K); Miera 4590 (N--photo, Z--photo); São Paulo: Miera s.n. [Araras, Jan. 7, 1838] (Bm); Santa Catharina: Schwacke 12,966 (Cb, N--fragment); Ule 1537 (A--photo, B--photo, D--photo, F--photo, G--photo, N--photo, S--photo, W--photo, Z--photo), 1865 (N--photo, Z--photo); Rio Grande do Sul: Malme 898 (S--2), 951 (S); Tweedie s.n. [Porto Alegre] (N--photo, Z--photo).

14a. AEGIPHILA RIMBACHII Moldenke, sp. nov.

Frutex vel arbor; ramulis plusminus furfuraceo-puberulis glabrescentibus; petiolis crassis furfuraceis submarginatis; laminis coriaceis nitidis oblongo-ellipticis vel ellipticis vel subobovatis subacutis vel obtusis integris subrevolutis, ad basin acutis vel cuneatis, utrinque glabris (praeter costa puberula vel cinereo-pulverulenta), subtus punctulatis; inflorescentiis axillaribus glomeratis multifloris; calyce campanulato brevissime tomentello, margine truncato integro.

Shrub or tree; branchlets more or less acutely or obtusely tetragonal, stramineous or brownish, sparsely lenticellate, more or less furfuraceous-puberulent, becoming subglabrate; principal internodes apparently variable and irregu-

lar, 0.7--6 cm. long, often a long one followed immediately by a very short one and then a very long one again, so that the leaves may appear to be whorled; leaves decussate-opposite, often approximate; petioles stout, 1.3--2 cm. long, flat above, rounded beneath, furfuraceous, slightly margined; blades coriaceous, bright green above, much darker and blackening beneath only in drying, nitid on both surfaces, oblong-elliptic, elliptic, or tending toward being slightly obovate, 10--14 cm. long, 3.5--5.5 cm. wide, bluntly acute or rounded at apex, entire and slightly revolute along the margins, acute or cuneate at base, glabrous above or slightly puberulent along the midrib, glabrous beneath except for the cinereous-pulverulent or puberulent midrib, somewhat punctate beneath; midrib stout, more or less impressed or else prominent in a groove above, very prominent beneath; secondaries slender, 6 or 7 per side, arcuate-ascending and strongly joined almost at the margins beneath, often subimpressed above, very sharply prominent beneath; vein and veinlet reticulation very sparse and obscure on both surfaces or a few veins sharply prominent near the margins beneath and connecting the secondaries; inflorescence axillary, glomerate, the fascicles many-flowered and dense; calyx campanulate, about 5.4 mm. long and 5.7 mm. wide at apex, very short-tomentellous, its rim truncate and entire; corolla hypocrateriform, actinomorphic, glabrous outside, its tube broadly infundibular, about 5.4 mm. long, ampliate to 5.5 mm. at apex, its limb 4-parted, regular, its lobes ovate-lingulate, about 3.1 mm. long and wide, rounded at apex; stamens 4, included, inserted about 1.7 mm. below the mouth of the corolla-tube; filaments filiform, about 1.3 mm. long, glabrous; anthers oblong, about 3.1 mm. long and 1 mm. wide, 2-celled, dorsifixed just above the base, the thecae parallel; pistil included; style heavy, about 3.1 mm. long, glabrous; stigma bifid, its branches about 1.6 mm. long, divergent; ovary subglobose, about 1 mm. long and wide, glabrous, 4-lobed, 4-sulcate, 4-celled, 4-ovulate; fruiting-calyx and fruit not seen.

The type of this most distinctive species was collected by August Rimbach (No. 234) on the outer slope of the Western Cordillera above Balsapampa, at an altitude of 2600 m., Los Ríos, Ecuador, in October, 1934, and is deposited in the herbarium of the Field Museum of Natural History at Chicago. It is named in honor of its distinguished collector, who has made such noteworthy collections in a little-known region of Ecuador. He describes the species as follows: "Middle-sized forest tree. Leaves opposite, thickly stiff, glabrous, shining. Flowers in axillary glomerations. Flower 13 mm. long. K. gamopetalous with brownish pubescence. C. with greenish tube and 4 reddish lobes. A. 4, fixed in the corolla-tube.

P. superior, with globular ovary and thin style. Fruit not seen. Wood yellowish. Cortex 5 mm. thick. Bark gray, rough, with round warts."

ECUADOR: Los Ríos: Rimbach 234 [Mus. Yale School of Forestry 28,648] (N--isotype, N--fragment of type, N--photo of isotype, W--isotype, Y--isotype, Z--photo of isotype).

118. AEGIPHILA RORAIMENSIS Moldenke.

Additional citations: BRITISH GUIANA: Appun 1204 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

44a. AEGIPHILA SALTICOLA Moldenke in Fedde, Repert. 37: 211-212. 1934.

Spreading shrub, to 3 m. tall; branchlets stoutish, tetragonal, somewhat flattened and ampliate at the nodes, very densely and shortly appressed-pubescent; principal internodes 4-5.5 cm. long; leaves decussate-opposite; petioles stout, 1-3.5 cm. long, densely appressed-pubescent with extremely short blackish hairs; blades membranous, oblong-elliptic, 12-19 cm. long, 5-7 cm. wide, acuminate at apex, entire, long-cuneate at base, roughened with abundant minute elevated punctae above, densely pubescent or subvillose beneath; midrib very stout, prominent beneath; secondaries slender, 9-12 on each side, ascending, not very arcuate, prominent and distinctly arcuate-joined near the margins beneath; vein and veinlet reticulation slender, mostly hidden beneath and obscure above; inflorescence supra-axillary; cymes solitary, opposite, about 4 cm. long and 3 cm. wide, very densely many-flowered, often subcapitate in fruit; peduncles slender, about 2 cm. long, densely short-appressed-pubescent; branches of the cymes and the pedicels slender, densely subvillose, the fruiting-pedicels to 6 mm. long; flowers not seen; fruiting-calyx cupuliform, 3-5 mm. long, 6-9 mm. wide, densely subvillose with whitish hairs, its margin shallowly 4-lobed with broadly triangular lobes; fruit drupaceous, oblong, about 7 mm. long and 6 mm. wide, yellow when mature, smooth, hard, not at all fleshy, 4-seeded.

The type of this neglected species was collected by Ynes Mexia (No. 5922) along the edge of cut-over woods in the Japanese colony at Thomé Assú, district of Acará, altitude about 30 m., Pará, Brazil, July 16, 1931, and is deposited in the herbarium of the Field Museum of Natural History at Chicago. It is very closely related to A. integrifolia, from which its pubescence, however, at once distinguishes it.

BRAZIL: Pará: Mexia 5922 (B--photo of type, F--type, K--

photo of type, N--fragment of type, N--photo of type, S--photo of type, Z--photo of type).

63a. AEGIPHILA SCANDENS Moldenke in Fedde, Repert. 37: 212. 1934.

Scandent shrub; branches rather slender, obtusely tetragonal, buff, rather densely furfuraceous-puberulent; principal internodes elongate, 4.5--7.5 cm. long; leaves decussate-opposite; petioles stoutish, 7--10 mm. long, densely puberulent; blades firmly membranous or subcoriaceous, dark green and nitid, slightly lighter beneath, ovate or ovate-elliptic, 14--19 cm. long, 5--8.5 cm. wide, acute at apex, entire, rounded at base, glabrous on both surfaces (except for the more or less puberulent midrib beneath), densely impressed-punctate beneath; midrib rather slender, sharply prominent in a channel above, very prominent beneath; secondaries slender, 8--10 per side, arcuate-ascending; inflorescence axillary and terminal; axillary cymes very few, apparently in the uppermost axils only, to 5 cm. long and 4.5 cm. wide, many-flowered, bracteolate; panicle terminal, about 10.5 cm. long and 6.5 cm. wide, composed of about 9 cymes, its sym-podia short and densely yellowish-puberulent; peduncles rather slender, 1.5--3 cm. long, yellowish-puberulent; bractlets various, oblong, obovate, lanceolate, or elliptic, 3--13 mm. long, 1--3 mm. wide, rather long-stipitate, sparsely puberulent; pedicels very slender, 1--3 mm. long, densely yellowish-puberulent; calyx campanulate, about 3.1 mm. long and 3.6 mm. wide at apex, minutely puberulent, its margin subtruncate, slightly scarious and repand; corolla hypocrateriform, yellow, its tube cylindric, about 9.5 mm. long, ampliate above, its lobes 4, lanceolate-oblong, 4--6.5 mm. long and 1--1.8 mm. wide, subacute at apex; stamens 4, inserted about 4.9 mm. below the mouth of the corolla-tube, exerted; filaments filiform, about 9 mm. long, glabrate; anthers and pistil not seen; ovary obovate, tetragonal, about 1 mm. long and wide, glabrous, 4-celled; fruiting-calyx and fruit not seen.

The type of this handsome species was collected by Ernst Heinrich Georg Ule (No. 9721) at Seringal Auristella on the Rio Acre, Acre Territory, Brazil, in March, 1911, and is deposited in the herbarium of the Royal Botanic Gardens at Kew. The label on the type specimen bears the written annotation "Peru", but according to that indefatigable collector, Mr. B. A. Krukoff, who has done perhaps more than any one person since the days of the pioneer explorers and collectors in Brazil to advance our knowledge of the flora of that country, the Seringal Auristella is definitely in Acre Territory, Brazil.

BRAZIL: Acre Territory: Ule 9721 (B--isotype, K--type,

N--fragment of type, N--photo of type, Z--photo of type).

108a. AEGIPHILA SCHIMPFII Moldenke, sp. nov.

Frutex; ramulis dense puberulis; petiolis dense puberulis; laminis chartaceis fragilibus ellipticis longe acuminatis integris, ad basin acutis, supra sparsiuscule puberulis, subtus dense puberulis; inflorescentiis axillaribus terminalibusque; cymis axillaribus subpaucis, ad apicem ramulorum congestis; paniculis terminalibus thyrsoides ubique dense puberulis.

Shrub, to 5 m. tall; branchlets slender, obtusely tetragonal, brownish, densely puberulent, rather sparsely lenticellate; nodes not annulate; principal internodes 3--7 cm. long; leaf-scars large and prominent, borne on elongate stout and divergent sterigmata; leaves decussate-opposite; petioles slender, 7--8 mm. long, densely puberulent with brownish hairs like the branchlets, slightly flattened above, convex beneath, not noticeably ampliate at base; blades chartaceous, dark green above, lighter beneath, very fragile and undate in drying, elliptic, 8--18 cm. long, 3.5--6.5 cm. wide, long-acuminate at apex, entire, acute at base, rather sparsely puberulent above, densely so beneath, the puberulence brownish like that on the branchlets and petioles; midrib slender, slightly prominent above, rounded-prominent beneath; secondaries slender, 8--15 per side, irregular, flat above, prominent beneath, arcuate-ascending, not conspicuously anastomosing; vein and veinlet reticulation very slender, obscure above, flat or the larger portions subprominent beneath; inflorescence axillary and terminal; axillary cymes rather few, crowded toward the apex of the branchlets and building up an elongate pyramidal thyrses with the terminal panicle, the individual cymes 2--5.8 cm. long and 1--3 cm. wide, densely many-flowered; terminal panicle 8--13 cm. long, 4--4.5 cm. wide at base, composed of 3 or 4 pairs of cymes and a terminal one; peduncles of cymes 1--3.5 cm. long, of panicles 4--5 cm. long, densely puberulent throughout; sympodia densely brown-puberulent like the peduncles; bractlets and prophylla filiform, 1--3 mm. long, short-pubescent-pilose; calyx campanulate, 2.9--3 mm. long, about 2.5 mm. wide at apex, slightly contracted just above the ovary, pulverulent and slightly puberulent, its rim 4-toothed, the teeth triangular, about 1 mm. long and wide at base, rounded, short-apiculate with a callose point at apex; corolla infundibular, its tube narrow-cylindric, about 3.5 mm. long, glabrous outside, tomentulose in the throat within, its limb 4-parted, its lobes elliptic, about 2.7 mm. long and 1 mm. wide, obtuse at apex; stamens 4, inserted at apex of the corolla-tube; filaments obsolete; anthers sessile, elliptic, a-

bout 0.5 mm. long and 0.3 mm. wide, dorsifixed near the base; pistil long-exserted; style capillary, about 4.5 mm. long, glabrous; stigma bifid, its branches greatly elongate, 5--5.5 mm. long, twisted; ovary minute, tetragonal, black, about 0.5 mm. long and wide, glabrous, 4-sulcate, 4-lobed at apex, 4-celled; fruiting-calyx incrossate, about 4 mm. long and 6 mm. wide, obscurely pulverulent-puberulent or glabrate, its rim subentire or shallowly erose; fruit not seen.

The type of this recently discovered species was collected by H. J. F. Schimpff (No. 1003) -- in whose honor it is named -- in a forest near Biscay, Ecuador, at an altitude of 300 m., April 18, 1934, and is deposited in the herbarium of the Botanisches Museum at Berlin.

ECUADOR: Province undetermined: Schimpff 1003 (B--type & isotype, N--fragment of type).

39. AEGIPHILA SELLOWIANA Cham.

An additional synonym is Aegiphila Orbignyana Mart., in herb. The accepted specific name for the species is also sometimes misspelled "Selloviana" or "Schowiana". On page 475 of my monograph I cited a "Riedel & Luschnath 1815" for this species -- this is a typographic error for Riedel & Luschnath 1812. The "Severén 188" cited on page 476 is an error and should be deleted. On page 334 I cited "Sellow s. n. [flowers]" as the type collection; this should be cited as a cotype collection, since the species was based by Chamisso on two separate collections. Schwacke states that the flowers are odorous. Miss Mexia describes the species as a common shrub, with long straggling branches, growing to be a tree, with slightly fragrant flowers and greenish-white corollas. Saint-Hilaire reports the vernacular name "habiará", while "cajugá" has also been reported from Brazil.

Additional citations: BRAZIL: Bahia: Blanchet 28 (Bm); Riedel 222 (L--2); Goyaz: Pohl & Schott 936/4915 (V--2); Matto Grosso: Malme 2473 (S, W); Minas Geraes: Ackermann s.n. [1831] (Br--2); Clausen 361 (B), 632 (Cp, P--3, Us), s.n. [Minas Geraes; Herb. De Candolle 869 & 876] (Cb--4, Dc--2, K), s.n. [Aug.--April, 1840] (Br--2, K); Damazio 1926 (X--5); Frambach 123 (F, N, S); Gaudichaud s.n. [1830] (Dc); Henschen s.n. [Herb. Regnell I.184, 1868] (B, Us, W, Z--3 photos); Mexia 5396 (B, Bm, Cb, E, G, I, P, S); Regnell I. 184 [1845] (Cp), I.184 [1866; Herb. Monac. 1658] (Br, Mu, Ol--3, S--2, Us, W), I.184 [1877] (Us); Saint-Hilaire 2229 (P), 2229 ter (P--2), s.n. [Itabura] (P--3); Schwacke 11, 264 (Cb); Warming s.n. [Lagoa Santa] (Bm, Cp); Espirito Santo: Campos Novas 932 (Vu); Luetzelburg 12, 345 (Mu); Rio de Janeiro: Burchell 2042 (K), 2492 (B--photo, D--photo, G--photo, S--photo, W--photo, Z--photo); Glaziou 808 (Br--2, Cp--2, K, Z--photo), 5956 (Cp, P--2), 14, 164 (Bm, Br, Cb--2, Cp, K--2,

P--2); Langsdorff s.n. [Mandiocca; Riedel] (L--2); Martius 448 [Herb. Monac. 1042] (Mu); Miers 4592 (P), s.n. [Organ Mount., 1828] (Bm), s.n. [Imbuby, Organ Mt., Dec. 1837] (Bm); Peckolt 223 (Z--photo), 422 (Br); Pohl s.n. [Herb. Imp. Vien. 150] (B, K); Riedel 0,34 (L--2), s.n. [Rio de Janeiro] (Us); Schüch s.n. (V); Sellow s.n. [flowers] (K--2 cotypes, N--2 photos of cotypes, P--cotype), s.n. [fruit] (A--photo of cotype, B--2 cotypes, B--photo of cotype, Bm--cotype, D--photo of cotype, F--photo of cotype, G--photo of cotype, K--cotype, W--photo of cotype, Z--4 photos of cotypes); Warming s.n. (Cp); São Paulo: Brade 7464 (B); Burchell 3418, in part (K), 4604 (K); Collector undesignated 3653 (Vu); F. C. Hoehne s.n. [Herb. Inst. Biol. S. Paulo 8179] (A, W); Kos-cinsky 225 [Herb. Inst. Biol. S. Paulo 31,636] (K, Sp); Löfgren s.n. [Herv. Geogr. e Geol. 373] (Cp), s.n. [Herv. Geogr. e Geol. 407] (Cp); Mosén 1534 (Z--photo), 3035 (S, Us, Z--photo), 4323 (A--photo, B--photo, D--photo, F--photo, G--photo, N--photo, P, W--photo, Z--photo); Riedel & Lusch-nath 1812 (L--2); Widgren 1177 (Us), II.1176 (Us), II.1176 1/2 (Us); Paraná: Dusén 474a (E), 2532 (G); 11,228 (Z--photo), 15,855 (B, Cb, E, K, W), 16,162 (Cb, D), 16,669 (B, N--photo, Z--2 photos), 17,362 (B, E, S, W, Z--photo); Rio Grande do Sul: Malme 799 (B, N--photo, Us, Z--photo); State undetermined: Blanchet s.n. (Bm); Herb. Martius s.n. [Herb. Monac. 1450] (Mu); Herb. Zuccarini s.n. [Herb. Monac. 1043] (Mu). BOLIVIA: La Paz: M. Bang 1332 [Herb. Monac. 1725] (Bm, Cb--2, E, Ed, K, Mi, Mu, N--photo, S, Vu, Z--photo); Santa Cruz: D'Orbigny 1094 (P--2). CULTIVATED: Brazil: São Paulo: F. C. Hoehne, pl. viv. 192 [Herb. Inst. Biol. S. Paulo 28,666] (N--2).

16. AEGIPHILA SESSILIFLORA Moldenke.

Additional citations: COLOMBIA: Antioquia: Archer 392 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

104. AEGIPHILA SETIFORMIS Rusby.

The "Bang 878a" cited by me as the type collection of this species on pages 434, 435, and 472 of my monograph, should more accurately be cited as "M. Bang 878a, in part", since some sheets of this number are A. spicata.

Additional citations: BOLIVIA: La Paz: M. Bang 878a, in part (A--photo of type, B--photo of type, Bm--isotype, D--photo of type, E--isotype, Ed--isotype, G--photo of type, K--isotype, N--photos of type & of 2 isotypes, P--photo of type, S--photo of type, W--isotype, W--photo of type, Z--photos of type & of 2 isotypes), 1732 [Herb. Monac. 1727]

(B, B--photo, C, Cb, D--photo, E, F, Mi, Mu, N--3 photos, P--photo, S--photo, V, Vu, W, W--photo, Z--3 photos).

94. AEGIPHILA SMITHII Moldenke.

Additional citations: PERU: San Martín: Klug 3894 (S); Loreto: Killip & Smith 26,957 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--isotype, G--photo of type, K--isotype, K--photo of type, N--photos of type & of isotype, P--photo of type, S--photo of type, W--photo of type, Z--photos of type & of isotype); Klug 1460 (A--photo, B--photo, D--photo, K--photo, N--photo, P--photo, S--photo, W--photo, Z--2 photos), 1490 (Z--photo); Melin s.n. [Iquitos] (S); Mexia 6499 (N); Tessmann 3591 (Cb, Hb), 3603 (Hb); L. Williams 3689 (S).

14. AEGIPHILA SORDIDA Moldenke.

Additional citations: PERU: Loreto: L. Williams 5054 (A--photo of type, B--photo of type, D--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

103. AEGIPHILA SPICATA (Rusby) Moldenke.

Additional citations: BOLIVIA: La Paz: M. Bang 878a, in part (A--photo, B--photo, D--photo, F--photo, G--photo, K--photo, P--photo, W--photo, Z--photo).

46. AEGIPHILA SPLENDENS Schau.

Additional citations: BRAZIL: Minas Geraes: Pohl 1022 [Herb. Imp. Vien. 149] (A--photo of isotype, B--photo of isotype, D--photo of isotype, F--photo of isotype, G--photo of isotype, K--isotype, N--fragment of isotype, N--photos of type & of 4 isotypes, P--isotype, S--photo of isotype, W--photo of isotype, Z--photos of type & of 4 isotypes).

92. AEGIPHILA SPRUCEANA Moldenke.

The Spruce 3017 cited by me on page 417 of my monograph as a cotype collection of this species, should not have been called a cotype. The species is based solely on Spruce 2296.

Additional citations: BRAZIL: Amazonas: Koch-Grünberg 93 (B); Spruce 2296 (A--photo of type, B--isotype, B--photo of type, Bm--isotype, Br--isotype, Cb--isotype, Cp--isotype, D--photo of type, Ed--isotype, F--isotype, F--photo of type, G--photo of type, K--isotype, N--isotype, N--photos of type & of isotype, W--photos of type & of isotype, Z--photos of type & of isotype), 3017 (K, N--3 photos, S, Z--3 photos).

26. AEGIPHILA STANDLEYI Moldenke.

Additional citations: COSTA RICA: San José: P. C. Standley 37,570 (A--photo of type, B--photo of type, D--photo of

type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

[53]. AEGIPHILA STRICTA Rusby.

The species described by me on pages 352 and 353 under the name of A. stricta must take on the older name of A. laeta H.B.K., which see in these supplementary notes for details [Phytologia 1: 228--229. 1937].

123. AEGIPHILA SUFFLAVA Moldenke.

Additional citations: PERU: Loreto: Killip & Smith 27,439 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photos of type & of isotype, P--photo of type, S--photo of type, W--photo of type, Z--photos of type & of isotype); Klug 2076 (B, E, G, K, Mi, W); Tessmann 5155 (Z--photo); L. Williams 8225 (Z--photo).

84. AEGIPHILA SURFACEANA Moldenke.

Additional citations: BRAZIL: Amazonas: Rob. Schomburgk 981 (Bm, Cb--3, F, K, Le, N--3 photos, P, Z--4 photos); Spruce 2297 (K--2, N--photo, Z--photo); Tate 162 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--2 photos of type, P--photo of type, S--photo of type, W--photo of type, Z--2 photos of type); Pará: Dahlgren & Sella 173 (A--photo, B--photo, D--photo, G--photo, N--photo, P--photo, S--photo, W--photo, Z--photo); Huber 2022 (F--photo, Z--photo), 3296 (F--photo, Z--photo).

55. AEGIPHILA SWARTZIANA Urb.

The fruiting-calyx is shallowly cupuliform, black in drying, about 3 mm. long and 7 mm. in diameter, glabrous, somewhat striate, its margin subtruncate or slightly and irregularly erose and subscarious. The fruit is oblong, 4--5 mm. long and wide, glabrous, not nitid, blackening in drying.

Additional citations: JAMAICA: W. Harris 11,716 (A--photo, B--photo, Bm, D--photo, E, K, N--4 photos, P, W--photo, Z--4 photos); Swartz s.n. [Jamaica] (A--photo of type, B--fragment of type, B--photo of type, Bm--isotype, D--photo of type, F--photo of type, G--photo of type, N--photo of type, W--photo of type, Z--photo of type); Wolle s.n. (G).

50. AEGIPHILA SYLVATICA Moldenke.

Additional citations: COLOMBIA: Santander Sur: Killip & Smith 14,849 (B--photo of isotype, D--photo of isotype, F--photo of isotype, G--photo of isotype, K--photo of isotype, N--2 photos of isotypes, P--photo of isotype, S--photo of

isotype, W--photo of isotype, Z--photos of type & of 3 isotypes).

1. *AEGIPHILA TERNIFOLIA* (H.B.K.) Moldenke.

The specimen of Goudot s.n. in the Kew herbarium, cited below, is anomalous in having its leaves merely opposite instead of ternate as is usual in this species. The name "Amerina ternifolia (H.B.K.) DC." listed as a synonym on page 280 of my monograph, should more accurately be written "Amerina ternifolia (H.B.K.) P. DC."

Additional citations: COLOMBIA: Cundinamarca: Goudot s.n. [Near Bogotá] (A--photo, B--photo, D--photo, F--photo, G--photo, K, N--photo, P--photo, S--photo, W--photo, Z--photo); Department undetermined: Lehmann B.T.690 (Le, N, N--photo, Z--photo). LOCALITY OF COLLECTION UNDESIGNATED: Herb. Baillon s.n. (P).

56. *AEGIPHILA TRIFIDA* Sw.

This binomial is occasionally written "Aegiphila 3-fida". The species has been confused with Ixora fasciculata and Chomelia sp., and herbarium specimens have been distributed under those names!

Additional citations: JAMAICA: N. L. Britton 4053 (K, Z--photo); W. Harris 5892 (B, Bm), 6144 (B, Bm, Z--photo), 6273 (B, B--photo, Bm, D--photo, G--photo, N--3 photos, Os, P--photo, W--photo, Z--4 photos), 9372 (B, K); March 902 (B); McFadyen s.n. (B, K--2, N--photo, Z--photo); Orcutt 5622 (Ca); Purdie s.n. [Port Royal Mtns., Aug. 1843] (K); Swartz s.n. [Jamaica] (A--photos of type & of isotype, B--photos of type & of isotype, Bm--isotype, Cp--isotype, D--photos of type & of isotype, Dc--isotype, F--photos of type & of isotype, G--photos of type & of isotype, N--photos of type & of isotype, P--photo of type, S--isotype, W--photos of type & of isotype, Z--photos of type & of isotype).

9a. *AEGIPHILA TRIFLORA* Moldenke in Fedde, Repert. 37: 212--213. 1934.

Tree, 5--6 m. tall; branches rather stout, obtusely tetragonal or subterete, glabrous, covered with gray flakey bark; branchlets slender, short, gray or buff in color, glabrous, often ridged lengthwise; principal internodes very variable, 1--10 cm. long; leaves decussate-opposite or approximate; petioles 11--21 mm. long, glabrous, deeply canaliculate above, greatly incrassate and more or less expanded at base; blades rather firmly membranous, gray-green above, bright green beneath, oblong-oblongate, 9.5--19 cm. long, 3.4--6 cm. wide, short-acuminate at apex, entire, cuneate at base, glabrous and nitid on both surfaces; midrib slender, prominent in a channel above, prominent beneath; secondary

ies slender, 7--9 on each side, prominent in a channel above, prominent beneath, usually very obscurely or not at all arcuate-joined at the margins; inflorescence axillary, 3-flowered, about 5.6 cm. long and 2.5 cm. wide; peduncles slender, 2--4 cm. long, ampliate at apex, glabrous; pedicels cuneate-ampliate, 11--19 mm. long, glabrous, widened into the calyx above; bractlets 2, filiform, about 3 mm. long, glabrous, borne at the base of the pedicels; calyx campanulate, about 6 mm. long and 3.6 mm. wide, glabrous, attenuate at base into the flattened pedicel, its margin 4-dentate, its teeth ovate-triangular, about 0.5 mm. long and 1.3 mm. wide at base; corolla hypocrateriform, its tube cylindrical, about 3.9 mm. long, glabrous, its lobes 5, oblong-obovate, about 4.6 mm. long and 2.6 mm. wide, rounded or subacute at apex; stamens 4, inserted about 1.5 mm. below the mouth of the corolla-tube, included; filaments about 0.6 mm. long, flattened; anthers sagittate, about 1 mm. long and 0.5 mm. wide at base; pistil exerted, glabrous; style rather stout, about 5.7 mm. long; stigma bifid, its branches about 0.6 mm. long, divaricate; ovary tetragonal, glabrous, about 1 mm. long and wide, 4-lobed, 4-celled; fruiting-calyx and fruit not seen.

The type of this remarkable species was collected by Ellsworth Paine Killip and Albert Charles Smith (No. 28,858) in a dense forest at Santa Rosa, on the lower Río Huallaga below Yurimaguas, at an altitude of about 135 m., Loreto, Peru, between September 1 and 5, 1929, and is deposited in the Britton Herbarium at the New York Botanical Garden. The fruit is described by the collectors as "pink". It seems to be related to A. cuneata from the same region. The latter differs conspicuously, however, in its short-petioled or sessile leaves, setose petioles, chartaceous and more or less asymmetrical leaf-blades which are setose on their venation, its many-flowered inflorescences, and its densely hirsute peduncles and pedicels.

PERU: Loreto: Killip & Smith 28,858 (N--type, W--isotype).

7. AEGIPHILA TRUNCATA Moldenke.

Additional citations: COLOMBIA: Cundinamarca: Mutis 3659 (F--photo, G--photo, K--photo, N--photo, Z--photo), 5191 (Cb--isotype, F--photo of type, G--photo of type, K--photo of type, N--photo of type, Z--photo of type).

59. AEGIPHILA UNIFLORA Urb.

Additional citations: JAMAICA: W. Harris 5533 (A--photo of isotype, B--type & 2 isotypes, B--photo of isotype, D--photo of isotype, G--photo of isotype, K--photo of isotype, N--2 photos of isotypes, P--photo of isotype, S--photo of

isotype, W--photo of isotype, Z--2 photos of isotypes).

8. AEGIPHILA VALERII Standl.

Additional citations: COSTA RICA: Guanacaste: Standley & Valerio 45,236 (A--photo, B--photo, D--photo, F--photo, G--photo, K, K--photo, N--photo, P--photo, S--photo, W--photo, Z--photo), 46,079 (N--photo, Z--photo); J. Valerio 148 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type). ILLUSTRATION: Line-drawing (N).

107. AEGIPHILA VELUTINOSA Moldenke.

The "Cook & Gilbert 1362" cited by me on page 472 of my monograph is a typographic error for Cook & Gilbert 1382.

Additional citations: PERU: Cuzco: Cook & Gilbert 1382 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

5. AEGIPHILA VERRUCOSA Schau.

Additional citations: VENEZUELA: Aragua: Allart 426 (N--photo, Ve, Z--2 photos); Fendler 841 (Cb, G, K); Jahn 444 (Ve, Z--photo); Karsten s.n. [Colonia Tovar, 1848] (B--6, Bm--2, K, L--3, N, N--2 photos, P, V--2, Z--4 photos), s.n. [1847] (B); Moritz 897 (A--photo of isotype, B--photo of isotype, Bm--isotype, Cb--2 isotypes, D--photo of isotype, F--photo of isotype, G--photo of isotype, K--isotype, N--fragment of isotype, N--photos of type & of 3 isotypes, S--photo of isotype, W--photo of isotype, Z--photos of type & of 3 isotypes), s.n. (Bm); H. Pittier 9347 (Ba, Z--photo).

37. AEGIPHILA VERTICILLATA Vell.

An additional synonym is Aegiphila lanata Casar., in herb. [not A. lanata Moldenke, 1933]. The "Dusén 7982" cited by me on page 473 of my monograph is a typographic error for Dusén 7980.

Additional citations: BRAZIL: Mattogrosso: A. Robert 434 (B, Bm), 434b (Z--photo); Minas Geraes: Casaretto 2624 (Cb); Clausen 15 (Cb), s.n. [Aug.--April, 1840] (Bm, K--2, Z--photo); Glaziou 13,056 (Br, Cb, Cp, P--3, Z--photo), 20,428 (B, Br, Cp, K, P, X); F. C. Hoehne, Com. Rondon 6109 (Sp); Lindberg 496 (Br); Mosén 1533 (N--photo, P, S, Us, Z--photo), 4322 (N--photo, S, Z--2 photos); Regnell I.310 [1845] (Ut), I.310 [1856] (S), I.310 [1862] (K, Z--photo), I.310 [1866; Herb. Monac. 1657] (A--photo, B--photo, Br, Cp--2, D--photo, F--photo, G--photo, Mu, N--photo, Ol--2, P--3, Vu, W--photo, Z--photo), II.310 [1856] (Us), II.310 [1874] (Us).